Density Monitor for Tank Waste Slurry (TechID 2936)

The Endress+Hauser Promass 63M Coriolis meter measures the mass flow, density, and temperature of fluids or slurries simultaneously. Once these are determined, other quantities of interest (volumetric flow and suspended solids concentration) can be calculated. The basic principle underlying the meter is that changes in density cause changes in the Coriolis force, which in turn cause changes in the resonant frequency of oscillating tubes.



Developers:

• Endress+Hauser, Greenwood, IN

Applications:

Demonstration and deployment at Oak Ridge Reservation (FY99)

Benefits:

• This monitor aids in preventing slurry pipeline blockages, which are costly to rectify, cause downtime, and create potential exposure risk to personnel.

Status:

- Commercially Available
- Developer is Endress+Hauser (317-535-7138)
- See Innovative Technology Summary Report for TechID 1547, Comparative Testing of Pipeline Slurry Monitors, (www.cmst.org)
- Further development work on Dual Coriolis Meters for slurry monitoring is underway: see TechID 2970 (Pipeline) and TechID 2989 (In-Tank)

Characterization, Monitoring, and Sensor Technology Crosscutting Program